

## **REMARKS**

The Office Action dated May 6, 2004 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1-24 are currently pending in the application and are respectfully submitted for consideration.

Claims 1-5, 11-17, and 23-24 were rejected under 35 U.S.C. 102(e) as being anticipated by Bar-Niv (U.S. Patent No. 6,442,142). The rejection is respectfully traversed for the reasons which follow.

Claim 1, upon which claims 2-12 are dependent, recites a method of regulating transceiver power consumption for a transceiver in a communications network. The method includes monitoring data received by the transceiver to detect the presence or absence of a received data signal, and controlling a transceiver state machine to regulate transceiver power consumption in response to the presence or absence of the data received.

Claim 13, upon which claims 14-24 are dependent, recites a transceiver power consumption regulator for a transceiver in a communications network. The transceiver power consumption regulator includes a data received monitor located on the transceiver to detect the presence or absence of a received data signal, and a transceiver state machine coupled between the data received monitor and transceiver components to regulate transceiver power consumption of the transceiver in response to the presence or absence of the data received detected by the data received monitor.

The claimed invention provides certain advantages over the prior art. For example, in one embodiment, signal detection may send a received signal to the auto power down system. The auto power down system is coupled via power control lines to every component of the transceiver and may control whether the component is drawing current from the computer power source. The auto power down system sends one or more power control signals to components of the transceiver to control whether the component is drawing current. Every component of the transceiver is responsive to and draws current based on the power control signal. The power control signal is continuously transmitted to the components of the transceiver. The receiving component will either begin drawing current or stop drawing current from the computer power source in response to the power control signal.

The cited prior art reference of Bar-Niv fails to disclose or suggest the elements of the claims, and therefore fails to provide the features discussed above.

Bar-Niv discloses a base-band receiver energy detection system. The signal energy detection system includes a digital filter which analyzes incoming pulses at a plurality of times to make an initial determination of signal energy on a communication line. The initial determination is further analyzed in a signal validation machine, which checks a time interval between consecutive signals found in the initial determination, in order to make an accurate final determination of the presence of valid signal energy on the communication line.

With respect to the rejection of claim 1, Bar-Niv fails to disclose or suggest monitoring **data received by the transceiver**. Rather, Bar-Niv discloses that signal pulses or energy are analyzed by a digital filter. Bar-Niv contains no disclosure of monitoring data or the use of a transceiver. Additionally, claim 1 recites, in part, detecting the presence or absence of a data signal received by the transceiver. Bar-Niv, on the other hand, discloses that the digital filter receives incoming data pulses, preferably generated by a squelch circuit responsive to the line energy, and checks if respective levels of the pulses at a plurality of preset times, most preferably two times, are above respective predetermined values" (Bar-Niv, Column 2, lines 9-14). Therefore, Bar-Niv fails to disclose or suggest detecting the **presence or absence** of a data signal received by the transceiver.

With respect to the rejection of claim 4, Bar-Niv fails to disclose or suggest comparing a received data signal from the communications network with a reference signal. Instead, Bar-Niv discloses outputting a digital signal SQPOS when the differential voltage exceeds 300mV (Bar-Niv, Column 4, lines 27-35). Thus, Bar-Niv fails to disclose or suggest comparing a received data signal with a reference signal.

Applicants note that claims 2-12 are dependent upon claim 1. Therefore, applicants respectfully submit that claims 2-12 should be found allowable for at least their dependence upon claim 1, and the specific limitations recited therein.

With respect to the rejection of claim 13, Bar-Niv fails to disclose or suggest "a data received monitor on the transceiver to detect the presence or absence of a received

signal,” as recited in claim 13. Rather, Bar-Niv discloses “a filter which compares a level of the signals measured at a plurality of predetermined times with predetermined reference levels” (Bar-Niv, Column 3, lines 20-23). In addition, Bar-Niv fails to disclose or suggest a transceiver state machine to regulate transceiver power consumption in response to the presence or absence of data received. Bar-Niv instead discloses a signal validation machine which receives an indication from the filter and in response compares a time interval between valid pulses with a predetermined reference time interval so as to determine whether the signals represent valid data pulses (Bar-Niv, Column 3, lines 25-29). Therefore, Bar-Niv fails to anticipate the elements of claim 13.

Applicants submit that claims 14-17 and 23-24 are dependent upon claim 13. Therefore, applicants respectfully assert that claims 14-17 and 23-24 should be allowed for at least their dependence on claim 13, and the specific limitations recited therein.

Claims 6-10 and 18-22 were rejected under 35 U.S.C. 103(a) as being unpatentable over Bar-Niv, in view of Uppunda (U.S. Patent No. 6,678,728). The Office Action took the position that Bar-Niv discloses all the elements of claims 6-10 and 18-22, with the exception of controlling the transceiver to transmit link determination signals to devices on the communications network when the transceiver is in a power-down mode. The Office Action then relies on Uppunda to cure the deficiency in Bar-Niv. The rejection is respectfully traversed for the reasons which follow.

Uppunda discloses a method and apparatus for automatically loading device status information into a network device. An embodiment of the invention includes an

apparatus in a network device that enters a sleep state under particular conditions. The apparatus includes a buffer for storing data that is to be transmitted and a memory device that stores configuration data. The configuration data is loaded to the apparatus each time the network device is powered up.

As stated above, Bar-Niv fails to anticipate the elements of independent claims 1 and 13. Furthermore, Uppunda fails to cure the deficiencies in Bar-Niv. Consequently, the combination of Bar-Niv and Uppunda fails to disclose or suggest the elements of claims 6-10 and 18-22 which are dependent upon claims 1 and 13, respectively. Therefore, applicants respectfully submit that claims 6-10 and 18-22 should be found allowable for at least their dependence on claims 1 and 13, respectively, and the specific limitations recited therein.

Applicants respectfully submit that Bar-Niv and Uppunda, whether viewed singly or in combination, fail to disclose or suggest critical and important elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-24 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Majid S. AlBassam  
Registration No. 54,749

**Customer No. 32294**  
SQUIRE, SANDERS & DEMPSEY LLP  
14<sup>TH</sup> Floor  
8000 Towers Crescent Drive  
Tysons Corner, Virginia 22182-2700  
Telephone: 703-720-7800  
Fax: 703-720-7802

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